

In The Claims:

Please amend claims 7 and 9-12 as follows (including the markings required by 37 C.F.R. § 1.173(d)):

7. (Amended) A [communicating] communication apparatus for communicating with a personal computer in which a telephone computer director software is stored,

said apparatus comprising:

line control means connected to a telephone line for conducting a line control operation including a dialing operation;

bell signal detection means for detecting a bell signal to produce a bell signal detection information when the bell signal is received from the telephone line;

caller information detecting means for detecting a caller telephone number notified to a call receiver by a caller telephone number notification service; and

central control means for transmitting the bell signal detection information to the computer for activating a telephone computer directory software in [a] the computer before said caller information detecting means detects the caller telephone number.

9. (Amended) A [communicating] communication apparatus communicating with a personal computer,

said apparatus comprising:

line control means connected to a telephone line for conducting a line control operation a dialing operation;

bell signal detection means for detecting a bell signal to produce a bell signal detection information when the bell signal is received from the telephone line;

caller information detecting means for detecting a caller telephone number notified to a call receiver by a caller telephone number notification service; and

central control means for activating a telephone computer directory application software in the computer by detecting the bell signal information by said bell signal detecting means and, after detecting a caller telephone number information by said caller information detecting means, for causing the software to retrieve and display information that is stored in [a] the computer and associated with the caller telephone number.

10. (Amended) The communication apparatus of claim 9, further comprising interface means for controlling a communication with the computer[;].

11. (Amended) A communication apparatus for communicating with a personal computer comprising:

first detecting means for detecting a bell signal information;

second detecting means for detecting a telephone number information;

memory means for storing [relating] caller information corresponding to the telephone number information;

display means for displaying the [relating] caller information; and

control means for activating a telephone computer directory application software after said first detecting means detects the bell signal information, and after said second detecting means detects the telephone number information, for retrieving the [relating] caller information stored in said memory means to display the relating information on said display means.

12. (Amended) A communication apparatus comprising:

- a computer with telephone computer directory application software;
- first detecting means for detecting a bell signal information;
- second detecting means for detecting a telephone number information;
- memory means for storing [relating] caller information corresponding to the telephone number information;
- display means for displaying the relating information; and
- control means for activating the telephone computer directory application software after said first detecting detects the bell signal information, and after said second detecting means detects the telephone number information, for retrieving the [relating] caller information stored in said memory means to display the [relating] caller information on said display means.

Please add new claims 14-21 as follows:

14. (New) A communicating apparatus, comprising:

- a line control unit connected to a telephone line for conducting a line control operation including a dialing operation;
- a bell signal detection unit for detecting a bell signal to produce a detection information when the bell signal is received from the telephone line;
- a caller information detecting unit for detecting a caller telephone number notified to a call receiver by a caller telephone number notification service;
- a central control unit for transmitting 1) the bell signal detection information for activating a telephone computer directory software in the personal computer, and 2)

immediately after a time when the bell signal is received, transmitting the caller telephone number which is detected by said caller information detecting unit for causing the telephone computer directory application software to access and display information stored in the computer that is associated with the caller telephone number.

15. (New) A communicating apparatus according to claim 14, further comprising:

a handset having a function for voice speech or a voice amplifying function;

a unit for closing the telephone line in accordance with a state of the handset;

and

an off-hook detecting unit for detecting an event that the telephone line is closed at initiation of communication;

said central control unit transmitting information of the detection from the off-hook detecting unit to a directory application initiation request unit integrally included in the personal computer for activating the telephone computer directory software in the personal computer when a call is originated from the communication apparatus.

16. (New) A communicating apparatus according to claim 14, further comprising:

an image reading unit for facsimile communication;

an operation unit for a user to close a line before initiating the facsimile communication; and

an off-hook detecting unit for detecting an event that the telephone line is closed at initiation of communication;

said control unit transmitting information of the detection from the off-hook detecting unit to a directory application initiation request unit integrally included in the personal computer for activating the telephone computer directory software in the personal computer when the line is closed before initiating the facsimile communication.

17. (New) A communicating apparatus according to claim 14, further comprising:

an off-hook detecting unit for detecting an event that the telephone line is closed at initiation of communication; wherein the central control unit for transmitting through the interface unit transmits:

a) information of the detection from the off-hook detection unit to a directory application initiation request unit incorporated in the personal computer for activating the telephone computer directory software in the personal computer when a call is originated from the communicating apparatus, and

b) information of the detection from the off-detecting unit subsequent to detection of the bell signal for causing the telephone computer directory software to display further information stored in the computer that is associated with the caller telephone number.

18. (New) A communicating apparatus according to claim 14, further comprising:

an off-hook detecting unit for detecting an event that the telephone line is closed at initiation of communication and outputting off-hook detection information;

a personal computer in which directory application software is loaded; and

an application software initiation request unit for initiating the directory application software in the personal computer in response to the off-hook detection information when a call is originated from the communicating apparatus and in response to the bell signal detection information when a call is received by the communicating apparatus.

19. (New) A communicating apparatus, according to claim 14, further comprising:

a modem connected to an external data communication device for conducting data communication;

a transformer for interrupting a direct current and for achieving a two-wire to four-wire transforming operation;

a receiver-side amplifier installed in a signal path on a receiver side;

a caller-side amplifier installed in a signal path on a caller side;

an off-hook detecting unit including a photo-interrupter for producing detection information in accordance with a voltage between a chip wire and a ring wire;

a bell signal detecting unit including a photo-interrupter for producing detection information at an output terminal end thereof when a bell signal is received via a telephone network;

a microphone and a speaker arranged for a speech without using hands;

an amplifier for amplifying a signal outputted from the microphone;
an amplifier for sounding the speaker; and
a switching unit for establishing and changing connections between the receiver side and the caller side.

20. (New) A communicating method, comprising the steps of:
conducting a line control operation including a dialing operation;
detecting a bell signal to produce a detection information when the bell signal is received;
detecting a caller telephone number notified to a call receiver by a caller telephone number notification service;
controlling a serial communication with a personal computer; and
transmitting through an interface 1) the bell signal detection information for activating a telephone computer directory software in a personal computer, and 2) immediately after a time when the bell signal is received, transmitting the caller telephone number which is detected for causing the telephone computer directory application software to access and display information stored in the computer that is associated with the caller telephone number.

21. (New) A communicating method according to claim 1, further comprising the step of detecting an event that the telephone line is closed at initiation of communication.

Status of Claims

Claims 1 -21 are pending in the present application upon entry of the foregoing claim amendments. Claims 7 and 9-12 are amended and new claims 14-21 are added.

Support for Patent Changes

The amendment to claim 7 is supported by at least Fig. 5 (S5-S7) and described in column 4, lines 40-61 of the '974 patent.

The changes to claim 9 are supported by at least bell signal detection 2b of Fig. 1 and column 5, lines 28-32 of the '974 patent.

The change to claim 10 is typographical.

The change to claims 11 and 12 are supported by at least column 5, lines 50-60 of the '974 patent.

New claims 14-21 are supported by Fig. 1 and the associated disclosure in column 2, line 48 to column 44, line 3 of the '974 patent.